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EXAMINER

FIGUEROA, FELIX O

ART UNIT

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/518,907
Filing Date: October 21, 2005
Appellant(s): HOFFMAN ET AL.

Gabriel D. Olander
For Appellant

EXAMINER'S ANSWER

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This is in response to the appeal brief filed January 9, 2009 appealing from the Office action mailed January 2, 2008.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

No amendment after final has been filed.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

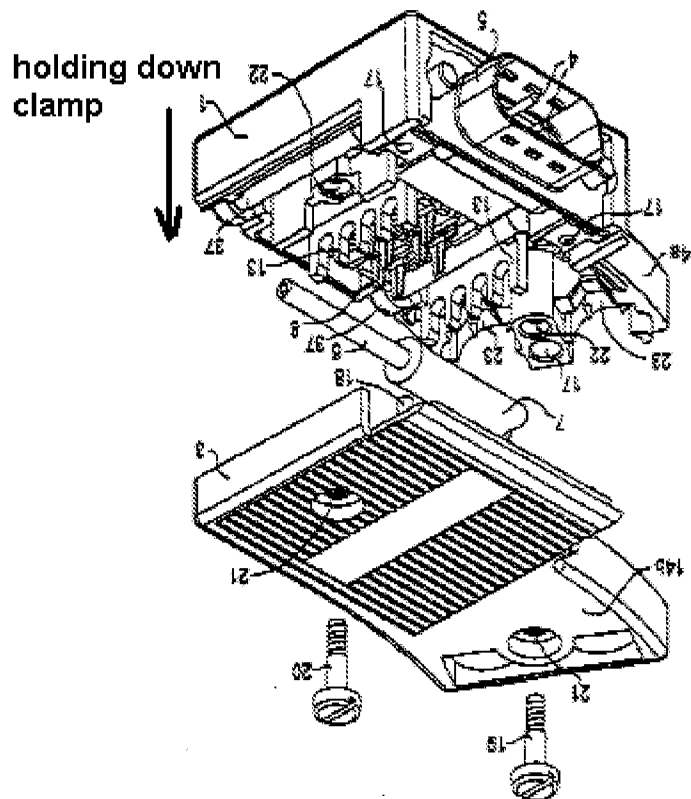
US 6,019,627	Embo et al.	02-2000
US 5,257,945	Heng et al.	11-1993
US 6,071,145	Toly	06-2000

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1, 25-40 and 43-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Embo (US 6,019,627) in view of Heng et al. (US 5,257,945).

Embo discloses a branching device for at least one electric line, the branching device comprising: a housing (3, 1) comprising a housing base section (3) and a housing upper section (3); and at least one electrically conducting wire terminal (9,4) that provides a branching contact, is accommodated in a holder (16) and includes contact lips, with cutting edges (at 11) for cutting through the insulation of the wire to be connected to the wire terminal; wherein the at least one wire terminal further includes at least one connecting lug (4), a through-channel (between the two 13) for the uninterrupted passage of the wire, and at least one holding-down clamp (combination of the bottom of 13 and 5) which holds the wires in the through channel of the wire terminal and which is inserted into the housing (see Response to Arguments); at least one of the contact lips is flexible in a direction pointing away from the through-channel; and the least one holding-down clamp exhibits a transverse plate (at 5) that closes off the through-channel and has an opening (not labeled) through which the connecting lug of the wire terminal protrudes.



Embo discloses substantially the claimed invention except for the contact lips being located diagonally to the through-channel. Heng teaches a terminal having contact lips located diagonally to the through-channel so that the tip of the edge of the contact lip protrudes into the through-channel (see Fig.4); at least one of the contact lips being flexible in a direction pointing away from the through-channel, thus preventing slipping of the wire when the wire is pulled/pushed. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to form the terminal of Embo, as taught by Heng, to prevent slipping of the wire when the wire is pulled/pushed.

In response to Appellant's argument that element 5 "is outside the housing", please note that the fact that the element has one portion outside the housing, does not negate that a substantial part is inside the housing. Nonetheless, please note that the holding-down clamp is not defined by element 5 alone, but by the combination of 5 and 13.

In response to Appellant's argument that element 13 "do not clamp", please see the previously presented figure in which Embo shows the bottom of 13 clamping down the wires. Please note that the screws 19 and 20 help clamping-down portion in place.

In response to Appellant's argument that the guides 13 are not "inserted into the housing", please note that the claim describes a process of manufacturing (i.e. "inserted") which is incidental to the claim apparatus. The method of forming a device is not germane to the issue of patentability of the device itself. It is well established that a claimed apparatus cannot be distinguished over the prior art by a process limitation. Therefore, this limitation has been given little patentable weight.

Regarding claim 25, Heng discloses the wire terminal exhibiting a generally octagonal outline with two opposing longer sides, two shorter sides orthogonal to the longer sides, and diagonal sides situated between the longer and shorter sides, and wherein the at least one holder includes a corresponding octagonal locating space for accommodating the wire terminal.

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Regarding claim 26, Heng discloses the contact lips being generally aligned with the diagonal sides of the wire terminal. Regarding claim 27, Embo, as modified by Heng, discloses the through-channel running in a straight line through the wire terminal.

Regarding claim 28, Embo, as modified by Heng, discloses the wire terminal being accommodated releasably in the holder.

Regarding claim 29, Embo, as modified by Heng, discloses the device including a number of wire terminals corresponding to at least a number of wires to be branched.

Regarding claim 30, Embo, as modified by Heng, discloses the contact lips being provided in pairs in each case on a wire terminal.

Regarding claim 31, Embo, as modified by Heng, discloses the spacing between two paired contact lips is less than or equal to the diameter of a wire to be connected to the wire terminal.

Regarding claim 32, Embo, as modified by Heng, discloses the edges of paired contact lips facing the through-channel running parallel to one another at least in sections.

Regarding claim 33, Embo, as modified by Heng, discloses two paired contact lips together form an entry section for the wire, with a spacing between the contact lips widening towards an entry side of the through-channel.

Regarding claim 34, Embo, as modified by Heng, discloses a notch being provided between the wire terminal and its holder.

Regarding claim 35, Embo, as modified by Heng, discloses the holder of the wire terminals being attached releasably to the housing.

Regarding claim 36, Embo, as modified by Heng, discloses multiple wire terminals and a common holder for all of the wire terminals.

Regarding claim 37, Embo, as modified by Heng, discloses a one common holding-down clamp for all wires.

Regarding claim 38, Embo, as modified by Heng, discloses the holding-down clamp representing a closure of the openings formed between the contact lips.

Regarding claim 39, Embo, as modified by Heng, discloses the holding-down clamp can be latched to the holder of the wire terminal.

Regarding claim 40, Embo, as modified by Heng, discloses the holding-down clamp can be latched to the housing.

Regarding claim 43, Embo, as modified by Heng, discloses the housing being assembled from a housing base section and a housing upper section.

Regarding claim 44, Embo, as modified by Heng, discloses the housing base section and the housing upper section can be screwed together (by 19, 20).

Regarding claim 45, Embo, as modified by Heng, discloses a strain relief (24) being provided on the housing at the outlets for the lines.

Claims 42 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Embo and Heng, as applied to claim 1, and further in view of Toly (US 6,071,145).

Embo, as modified by Heng, discloses substantially the claimed invention except for the use of seals. Toly teaches the use of sealing rings (49) at the outlets of the line to protect the interior connections from dust and moisture. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made

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to use sealing rings on the outlets, as taught by Toly, to protect the interior connections from dust and moisture.

(10) Response to Argument

Claim 1:

In response to Appellant's argument (on page 5, last paragraph) that "[n]owhere does Embo describe or suggest the holding-down clamp, which, as claimed, holds the wire in the through channel, is inserted in the housing, and exhibits a transverse plate that closes off the through-channel and has an opening through which the connecting lug of the wire terminal protrudes", please note that Embo discloses one holding-down clamp (define by the combination of the U shaped bottom of 13 and 5) which holds the wires in the through channel of the wire terminal (by the U shaped bottom of 13) and which is inserted into the housing (both 13 and 5 have portions inside the housing); and the at least one holding-down clamp exhibits a transverse plate (at 5) that closes off the through-channel (without the plate the through channel will be exposed from the side) and has an opening (not labeled) through which the connecting lug (4) of the wire terminal protrudes. Please note that when assembled together (as shown in Fig. 1), elements 5 and 13 integrally define the holding down clamp.

In response to Appellant's argument that "in Fig. 1 of Embo above, no such clamp is inside the housing and used to hold the conductor in the fork limbs 11 or guides 13", please note that the U shaped bottom portion of 13 helps clamp the conductor in the cutting edges (11), when pressed against the holder (16 on part of

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housing 3, Fig. 2). Without the U shaped bottom portion of 13, the wire would be cut completely by the cutting edges (11) and would fall out of the through channel.

In response to Appellant's argument that "no such clamp includes a transverse plate to close off the through channel with an opening for connecting lugs to protrude", please note that the holding down clamp is defined by the combination of 13 and 5. The transverse plate (on 5) closes off the through channel (from the side) and includes an opening for connecting lugs (4) to protrude.

In response to Appellant's argument (on page 6, second paragraph) that "neither the plug body 5 nor the guides 13 in Embo disclose or suggest that 'the at least one wire terminal further includes ... at least one holding-down clamp which holds the wires in the through-channel of the wire terminal and which is inserted in the housing' and "exhibits a transverse plate that closes off the through-channel and has an opening through which the connecting lug of the wire terminal protrudes,' as recited by independent claim 1", please note that one cannot show the limitations are not shown by Embo by attacking elements 5 and 13 individually where the rejection is based on the combination of elements 5 and 13. In this case, Embo disclose the at least one wire terminal further includes ... at least one holding-down clamp (defined by 13 and 5) which holds the wires in the through-channel (between two 13s) of the wire terminal and which is inserted in the housing and exhibits a transverse plate (at 5) that closes off the through-channel (from the side) and has an opening through which the connecting lug (4) of the wire terminal protrudes.

In response to Appellant's argument (on page 6, third paragraph) that "[t]he plug body 5 does not cover, enclose, or in any other way hold the IDC 6 within the guides 13", please note that the holding down clamp is define by the combination of 13 and 5. Nonetheless please note that element 5 closes off the through channel (from the side).

In response to Appellant's argument that "Embo's plug body 5 neither is inserted in the housing nor holds the wires in the guides 13", please note that the holding down clamp is define by the combination of 13 and 5. In this case, portion 5 is at least partially inserted into the housing (3, 1).

In response to Appellant's argument (on page 6, fourth paragraph) that "nowhere does the plug body 5 include an opening in a transverse plate through which a connecting lug protrudes," please note that element 5 includes a transverse plate (see Fig. 1) that includes at lest one opening through which lugs (4) protrude.

In response to Appellant's argument that "[t]he plug contact 4 of Embo is not in such a wire terminal" and "is in the plug body 5 which does not include either an uninterrupted passage of the wire or the holding down clamp", please note that the wire terminal is defined by the combination of 9 and 4. Contact 4 is part of the wire terminal when 4 and 9 are assembled/connected together.

In response to Appellant's repeated argument (on page 7, first full paragraph) that "neither the plug body 5 nor the guides 13 in Embo disclose or suggest that 'the at least one wire terminal further includes ... at least one holding-down clamp which holds the wires in the through-channel of the wire terminal and which is inserted in the housing' and "exhibits a transverse plate that closes off the through-channel and has an

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opening through which the connecting lug of the wire terminal protrudes,' as recited by independent claim 1", please note that Embo discloses one holding-down clamp (define by the combination of the U shaped bottom of 13 and 5) which holds the wires in the through channel of the wire terminal (by the U shaped bottom of 13) and which is inserted into the housing (both 13 and 5 have portions inside the housing); and the least one holding-down clamp exhibits a transverse plate (at 5) that closes off the through-channel (without the plate the through channel will be exposed from the side) and has an opening (not labeled) through which the connecting lug (4) of the wire terminal protrudes. Please note that when assembled together (as shown in Fig. 1), elements 5 and 13 integrally define the holding down clamp.

In response to Appellant's argument (on page 7, fourth full paragraph) that "Heng, like Embo, does not disclose or suggest 'the at least one wire terminal further includes ... at least one holding-down clamp which holds the wires in the through-channel of the wire terminal and which is inserted in the housing' and "exhibits a transverse plate that closes off the through-channel and has an opening through which the connecting lug of the wire terminal protrudes,' as recited by independent claim 1", it is again noted that Embo discloses the holding-down clamp (define by the combination of the U shaped bottom of 13 and 5) which holds the wires in the through channel of the wire terminal (by the U shaped bottom of 13) and which is inserted into the housing (both 13 and 5 have portions inside the housing); and the least one holding-down clamp exhibits a transverse plate (at 5) that closes off the through-channel (without the plate the through channel will be exposed from the side) and has an opening (not labeled)

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through which the connecting lug (4) of the wire terminal protrudes. When assembled together (as shown in Fig. 1), elements 5 and 13 integrally define the holding down clamp.

Claims 41 and 42:

In response to Appellant's repeated argument (on page 8, first paragraph) that "Heng, like Embo, does not disclose or suggest 'the at least one wire terminal further includes ... at least one holding-down clamp which holds the wires in the through-channel of the wire terminal and which is inserted in the housing' and "exhibits a transverse plate that closes off the through-channel and has an opening through which the connecting lug of the wire terminal protrudes,' as recited by independent claim 1", it is again noted that Embo discloses the holding-down clamp (define by the combination of the U shaped bottom of 13 and 5) which holds the wires in the through channel of the wire terminal (by the U shaped bottom of 13) and which is inserted into the housing (both 13 and 5 have portions inside the housing); and the least one holding-down clamp exhibits a transverse plate (at 5) that closes off the through-channel (without the plate the through channel will be exposed from the side) and has an opening (not labeled) through which the connecting lug (4) of the wire terminal protrudes. When assembled together (as shown in Fig. 1), elements 5 and 13 integrally define the holding down clamp.

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(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

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